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| APPLICATION NO.                                    | FILING DATE              | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--|--------------------------|----------------------|-------------------------|------------------|--|
| 10/774,656   | 02/05/2004               | Chau H. Duong        | 03004US                 | 8807             |  |
| 75   | 7590 10/12/2005          |                      |                         | EXAMINER         |  |
| Rohm and Haas                                      |                          |                      | CHEN, KIN-CHAN          |                  |  |
| Electronic Materials CMP Holdings, Inc. Suite 1300 |                          |                      | ART UNIT                | PAPER NUMBER     |  |
|  | 1105 North Market Street |                      |                         | 1765             |  |
| Wilmington, DE 19899                               |                          |                      | DATE MAILED: 10/12/2005 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.                          | Applicant(s)                       |  |  |  |
|---|--|------------------------------------|--|--|--|
|   | 10/774,656                               | DUONG, CHAU H.                     |  |  |  |
| Office Action Summary   | Examiner                                 | Art Unit                           |  |  |  |
|   | Kin-Chan Chen                            | 1765                               |  |  |  |
| The MAILING DATE of this communication app  | ears on the cover sheet with the c       | orrespondence address              |  |  |  |
| Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. |  |                                    |  |  |  |
| <ul> <li>Failure to reply within the set or extended period for reply will, by statute.</li> <li>Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>  | cause the application to become ABANDONE | D (35 U.S.C. § 133).               |  |  |  |
| Status  |  |                                    |  |  |  |
| 1) Responsive to communication(s) filed on  |  |                                    |  |  |  |
| 2a)☐ This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |  |                                    |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |                                    |  |  |  |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11, 4          | 53 O.G. 213.                       |  |  |  |
| Disposition of Claims   |  |                                    |  |  |  |
| 4) Claim(s) 1-10 is/are pending in the application.   |  |                                    |  |  |  |
| 4a) Of the above claim(s) <u>10</u> is/are withdrawn from consideration.  |  |                                    |  |  |  |
| 5)⊠ Claim(s) <u>8</u> is/are allowed.   |  |                                    |  |  |  |
| 6)⊠ Claim(s) <u>1-7 and 9</u> is/are rejected.  |  |                                    |  |  |  |
| 7) Claim(s) is/are objected to.   |  |                                    |  |  |  |
| 8) Claim(s) are subject to restriction and/o  | r election requirement.                  |                                    |  |  |  |
| Application Papers  |  |                                    |  |  |  |
| 9)☐ The specification is objected to by the Examiner.   |  |                                    |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |  |                                    |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |                                    |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |  |                                    |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |                                    |  |  |  |
| Priority under 35 U.S.C. § 119  |  |                                    |  |  |  |
| 12) Acknowledgment is made of a claim for foreign   | priority under 35 U.S.C. § 119(a)        | )-(d) or (f).                      |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.   |  |                                    |  |  |  |
| Certified copies of the priority documents have been received in Application No   |  |                                    |  |  |  |
| Copies of the certified copies of the priority documents have been received in this National Stage  |  |                                    |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |                                    |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |                                    |  |  |  |
|   |  | , =-                               |  |  |  |
|   |  |                                    |  |  |  |
|   |  |                                    |  |  |  |
| Attachment(s)   | _  |                                    |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) Interview Summary Paper No(s)/Mail D  |                                    |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  |  | Patent Application (PTO-152)       |  |  |  |
| Paper No(s)/Mail Date <u>070704</u> .   | 6) Other:                                |                                    |  |  |  |
| U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Office Ad   | tion Summary                             | Part of Paper No./Mail Date 100605 |  |  |  |

Application/Control Number: 10/774,656 Page 2

Art Unit: 1765

### **DETAILED ACTION**

#### Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-9, drawn to a polishing pad composition, classified in class 252, subclass 79.1.
  - II. Claim 10, drawn to a process, classified in class 438, subclass 692.
- 2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product such as optical lens abrading.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Edwin Oh on October 4, 2005 a provisional election was made without traverse to prosecute the invention of group I, claims 1-9.

Art Unit: 1765

Affirmation of this election must be made by applicant in replying to this Office action.

Claim 10 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### Claim Rejections - 35 USC § 112

3. Claims 1-4, 6, 7, and 9 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for coating materials listed in dependent claim 5, does not reasonably provide enablement for justifying or supporting a claim that would dominate every composition that having a surface tension of less than 50 dynes / cm. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The scope of the claim goes beyond the scope justified by the description of the invention provided in the specification and drawings, MPEP 2164.08.

# Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1765

Claims 5 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 5 and 7, "selected from the group comprising" is unclear as to the scope of the claim (It is an improper Markush language). The examiner suggests replacing it with "selected from the group consisting of".

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronay (US 2005/0042976).

Ronay teaches that the polishing pad may comprises a polishing layer have a polishing surface. The polishing layer may comprise particles disposed in a polymer matrix. The particles may be poly tetrafluoroethylene (or so-called non-abrasive particles in claim 9). Because it is conventional to use power coating to form the particles of poly tetrafluoroethylene. Therefore, it is considered to read on applicant's "the particles being coated with a material". The coated material is capable of releasing

Application/Control Number: 10/774,656 Page 5

Art Unit: 1765

from the polishing surface during polishing. See abstract, [0024]-[0027]. Since the particles may be poly tetrafluoroethylene. The surface tension of less than 50 dynes /cm (or 30 dynes /cm in claim 4) would have been expected.

As to dependent claim 2, see [0030].

As to dependent claim 3, see [0025].

As to dependent claim 6, see [0029].

6. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Misra et al. (US 2003/0054735).

Misra teaches that the polishing pad may comprises a polishing layer have a polishing surface. The polishing layer may comprise particles disposed in a polymer matrix. The particles may be coated with a material having a surface tension. The coated material is capable of releasing from the polishing surface during polishing.

See abstract, [0006]. The particles may be silica, calcium carbonate, glass etc., Misra does not specify that the coated particles have the surface tension of less than dynes/cm. However, Misra teaches that the polishing pad may be used for polishing different substrates with various polishing rates. It would have been obvious to one with ordinary skill in the art to use various coating materials that may contain various surface tensions. It is merely a matter of choices of design depending on product requirement.

### Allowable Subject Matter

7. Claim 8 is allowed.

Application/Control Number: 10/774,656

Art Unit: 1765

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kin-Chan Chen whose telephone number is (571) 272-1461. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Actober 6, 2005

Kin-Chan Chen Primary Examiner Art Unit 1765 Page 6